

ICF international / Laboratory Data Consultants

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MEMORANDUM

TO:

Lynda Deschambault, Remedial Project Manager

Site Cleanup Section 1, SFD-7-1

THROUGH:

Rose Fong, ESAT Task Order Manager (TOM)

Quality Assurance (QA) Program, MTS-3

FROM:

Doug Lindelor, Data Review Task Manager

Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041

Technical Direction Form No.: 00405051

DATE:

May 4, 2009

SUBJECT:

Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:

Omega Chem OU2

Site Account No.:

09 BC QB02

CERCLIS ID NO.:

CAD042245001

Case No.:

38274

SDG No.:

Y4N51

Laboratory:

Mitkem Laboratories (MITKEM)

Analysis:

Trace Volatiles

Samples:

20 Ground Water Samples (see Case Summary)

Collection Date:

March 2 through 5, 2009

Reviewer:

April Martinez, ESAT/Laboratory Data Consultants

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc:

Jennie Han-Liu, CLP PO USEPA Region 1

Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] Attention

[] Action

SAMPLING ISSUES: [X] Yes

[] No

Data Validation Report - Tier 3

Case No.: 38274 SDG No.: Y4N51

Site: Omega Chem OU2

Laboratory: Mitkem Laboratories (MITKEM) Reviewer: April Martinez, ESAT/LDC

Date: May 4, 2009

I. CASE SUMMARY

Sample Information

Samples: Y4N51 through Y4N53, Y4N55 through Y4N70, and

Y4N73

Concentration and Matrix: Low/Medium Concentration Water

Analysis: Trace Volatiles SOW: SOM01.2

Collection Date: March 2 through 5, 2009 Sample Receipt Date: March 3 through 6, 2009

Extraction Date: Not Applicable

Analysis Date: March 5, 9, 10, 12, and 13, 2009

Field OC

Field Blanks (FB): Y4N63, Y4N67, and Y4N79 (in SDG Y4N71)

Equipment Blanks (EB): Not provided
Trip Blank (TB): Not provided
Background Samples (BG): Not provided

Field Duplicates (D1): Y4N60 and Y4N61

Laboratory QC

Method Blanks & Associated Samples:

VBLK50: Y4N51, Y4N52

VBLK5S: Y4N53, Y4N55, Y4N56 VBLK5T: Y4N57 through Y4N70

VBLK5U: Y4N73, Y4N73MS, and Y4N73MSD

VBLKB5: Y4N57DL through Y4N62DL, Y4N65DL, Y4N66DL,

Y4N68DL through Y4N70DL, Y4N73DL

VBLKC5: Y4N64DL and storage blank VHBLKC5

<u>Tables</u>

1A: Analytical Results with Qualifications

1B: Data Qualifier Definitions for Organic Data Review

2: Calibration Summary

CLP PO Action

None.

CLP PO Attention

- 1. Detected results for chloroform in samples Y4N57 through Y4N62 and Y4N66 are qualified as nondetected and estimated (U,J) due to field blank contamination (see Comment B).
- 2. Results for some analytes are qualified as estimated (J) due to calibration problems (see Comments C and D).
- 3. Results for some analytes are qualified as estimated (J) due to deuterated monitoring compound (DMC) recovery problems (see Comment E).
- 4. Results for some analytes in samples Y4N57, Y4N58, Y4N59, Y4N61, Y4N64, and Y4N66 are qualified as estimated (J) due to internal standard (IS) area problems (see Comment F).

Sampling Issues

Detected results for chloroform in samples Y4N57 through Y4N62 and Y4N66 are qualified as nondetected and estimated (U,J) due to field blank contamination (see Comment B).

Additional Comments

Other than a laboratory artifact (approximate retention time of 6.9 minutes), tentatively identified compounds (TICs) were found in samples Y4N57, Y4N64, Y4N68, Y4N70, and Y4N73 (see attached Form 1Js).

This report was prepared in accordance with the following documents:

- ESAT Region 9 Standard Operating Procedure 901, Guidelines for Data Review of Contract Laboratory Program Analytical Services Volatile and Semivolatile Data Packages;
- USEPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration, SOM01.1, May 2005;
- Modifications Updating SOM01.1 to SOM01.2, Amended April 11, 2007; and
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, July 2007.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	<u>Parameter</u>	<u>Acceptable</u>	Comment
1.	Holding Time/Preservation	Yes	
2.	GC/MS Tune/GC Performance	Yes	
3.	Initial Calibration	No	C
4.	Continuing Calibration Verification	No .	C, D
5.	Laboratory Blanks	No	В
6.	Field Blanks	No	В
7.	Deuterated Monitoring Compounds	No	E
8.	Matrix Spike/Matrix Spike Duplicate	No	G
9.	Laboratory Control Sample/Duplicate	N/A	
10.	Internal Standards	No	F
11.	Compound Identification	Yes	
12.	Compound Quantitation	Yes	A, H, I
13.	System Performance	Yes	
14.	Field Duplicate Sample Analysis	Yes	

N/A = Not Applicable

III. VALIDITY AND COMMENTS

- A. The following results, denoted with an "L" qualifier, are estimated and flagged "J" in Table 1A.
 - All detected results below the contract required quantitation limits

Results below the contract required quantitation limits (CRQLs) are considered to be qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in analytical precision near the limit of detection.

- B. The following results are qualified as nondetected and estimated due to method blank and field blank contamination and are flagged "U,J" in Table 1A.
 - Methylene chloride in storage blank VHBLKC5
 - Chloroform in samples Y4N55, Y4N57 through Y4N62, Y4N66, and Y4N68

Methylene chloride was found in method blanks VBLK5S, VBLK5T, VBLK5U, and VBLKC5 and chloroform was found in field blanks Y4N63, Y4N67, and Y4N79 (see Table 1A for concentrations). Results for the samples listed above are considered nondetected and estimated (U,J) and quantitation limits have been raised according to blank qualification rules presented below.

No positive results are reported unless the concentration of the compound in the sample exceeds 10 times the amount in any associated blank for common laboratory contaminants or 5 times the amount for other compounds. If the sample result is greater than the CRQL, the quantitation limit is raised to the sample result and

reported as nondetected. If the sample result is less than the CRQL, the result is reported as nondetected at the CRQL.

A laboratory method blank is laboratory reagent water or baked sand analyzed with all reagents, deuterated monitoring compounds, and internal standards and carried through the same sample preparation and analytical procedures as the field samples. The laboratory method blank is used to determine the level of contamination introduced by the laboratory during analysis.

A field blank is clean water prepared as a sample in the field by the sampler and shipped to the laboratory with the samples. A field blank is intended to detect contaminants that may have been introduced in the field, although any laboratory-introduced contamination will be present. Contaminants that are found in the field blank which are absent in the laboratory method blank could be indicative of a field QC problem, a deficiency in the bottle preparation procedure, a difference in preparation of the laboratory and field blanks, or other indeterminate error.

- C. Results for the following analyte are qualified as estimated due to low RRFs in initial calibration and continuing calibration verifications (CCVs) and are flagged "J" in Table 1A.
 - 2-Butanone in samples Y4N53, Y4N55 through Y4N70, and Y4N73 and method blanks VBLK5S, VBLK5T, and VBLK5U

RRFs were below the 0.05 validation criterion for 2-butanone in CCVs (see Table 2). Since results are nondetected, false negatives may exist.

DMCs 2-butanone-d5 and 2-hexanone-d5 also had RRFs below the 0.05 validation criterion in the initial calibration and CCVs (see Table 2). Quantitation of the analytes associated with these DMCs may have been affected by low RRFs (see attached Table 9 from the Functional Guidelines).

The RRF evaluates instrument sensitivity and is used in the quantitation of target analytes.

- D. Results for the following analyte are qualified as estimated due to a large percent difference (%D) in the CCV and are flagged "J" in Table 1A.
 - Bromomethane in method blank VBLKC5 and storage blank VHBLKC5

A %D of +31.6% was reported for bromomethane in the 03/13/09 09:03 CCV, which exceeded the $\pm 30.0\%$ validation criterion for opening CCVs.

The continuing calibration checks the instrument performance daily and produces the relative response factors (RRFs) for target analytes that are used for quantitation.

E. Results for the following analytes are qualified as estimated due to DMC recoveries outside QC limits and are flagged "J" in Table 1A.

{Chloroethane-d5}

• Dichlorodifluoromethane, chloromethane, bromomethane, chloroethane, and carbon disulfide in sample Y4N51

{1,1-Dichloroethene-d2}

- 1,1-Dichloroethene and cis-1,2-dichloroethene in samples Y4N57 through Y4N62, Y4N66, Y4N69, and Y4N73
- 1,1-Dichloroethene, trans-1,2-dichloroethene and cis-1,2-dichloroethene in samples Y4N64 and Y4N65
- 1,1-Dichloroethene in samples Y4N68 and Y4N70

{Chloroform-d}

• 1,1-Dichloroethane in sample Y4N64

{Benzene-d6}

• Benzene in sample Y4N64

{Toluene-d8}

• Trichloroethene in sample Y4N66

DMC recoveries outside QC limits are shown below.

<u>Sample</u>	<u>DMC</u>	% Recovery	QC Limit
Y4N57	Vinyl chloride-d3	140	65-131
Y4N58	Vinyl chloride-d3	145	65-131
Y4N59	Vinyl chloride-d3	138	65-131
Y4N60	Vinyl chloride-d3	132	65-131
Y4N61	Vinyl chloride-d3	135	65-131
Y4N62	Vinyl chloride-d3	134	65-131
Y4N63	Vinyl chloride-d3	144	65-131
Y4N64	Vinyl chloride-d3	139	65-131
Y4N65	Vinyl chloride-d3	132	65-131
Y4N66	Vinyl chloride-d3	131	65-131
Y4N67	Vinyl chloride-d3	133	65-131
Y4N68	Vinyl chloride-d3	132	65-131
Y4N69	Vinyl chloride-d3	139	65-131
Y4N73	Vinyl chloride-d3	135	65-131
Y4N73MSD	Vinyl chloride-d3	136	65-131
Y4N57DL	Vinyl chloride-d3	149	65-131
Y4N58DL	Vinyl chloride-d3	157	65-131
Y4N59DL	Vinyl chloride-d3	155	65-131
Y4N60DL	Vinyl chloride-d3	160	65-131
Y4N61DL	Vinyl chloride-d3	161	65-131

Sample	DMC	% Recovery	QC Limit
Y4N62DL	Vinyl chloride-d3	158	65-131
Y4N65DL	Vinyl chloride-d3	171	65-131
Y4N66DL	Vinyl chloride-d3	170	65-131
Y4N68DL	Vinyl chloride-d3	170	65-131
Y4N69DL	Vinyl chloride-d3	172	65-131
Y4N70DL	Vinyl chloride-d3	168	65-131
Y4N73DL	Vinyl chloride-d3	159	65-131
Y4N64DL	Vinyl chloride-d3	172	65-131
Y4N51	Chloroethane-d5	65	71-131
Y4N51	1,1-Dichloroethene-d2	106	55-104
Y4N52	1,1-Dichloroethene-d2	109	55-104
Y4N57	1,1-Dichloroethene-d2	116	55-104
Y4N58	1,1-Dichloroethene-d2	132	55-104 55-104
Y4N59	1,1-Dichloroethene-d2	120	55-104 55-104
Y4N60	1,1-Dichloroethene-d2	118	55-104 55-104
Y4N61	1,1-Dichloroethene-d2	112	55-104 55-104
Y4N62	1,1-Dichloroethene-d2	127	55-104 55-104
Y4N63	· ·	121	55-104 55-104
Y4N64	1,1-Dichloroethene-d2 1,1-Dichloroethene-d2	113	55-104 55-104
Y4N65	•	117	55-104 55-104
Y4N66	1,1-Dichloroethene-d2	124	55-104 55-104
Y4N67	1,1-Dichloroethene-d2	117	55-104 55-104
	1,1-Dichloroethene-d2		
Y4N68	1,1-Dichloroethene-d2	128	55-104 55-104
Y4N69	1,1-Dichloroethene-d2	120 129	55-104 55-104
Y4N73	1,1-Dichloroethene-d2		
Y4N73MS	1,1-Dichloroethene-d2	122	55-104 55-104
Y4N73MSD	1,1-Dichloroethene-d2	129 112	55-104 55-104
Y4N58DL Y4N59DL	1,1-Dichloroethene-d2	108	55-104 55-104
Y4N60DL	1,1-Dichloroethene-d2 1,1-Dichloroethene-d2	112	55-104 55-104
Y4N61DL	1,1-Dichloroethene-d2	117	55-104 55-104
Y4N62DL	1,1-Dichloroethene-d2	114	55-104 55-104
Y4N65DL	1,1-Dichloroethene-d2	115	55-104
Y4N66DL	1,1-Dichloroethene-d2	117	55-104
Y4N68DL	1,1-Dichloroethene-d2	122	55-104
Y4N69DL	1,1-Dichloroethene-d2	123	55-104
Y4N70DL	1,1-Dichloroethene-d2	122	55-104
Y4N73DL	1,1-Dichloroethene-d2	113	55-104
Y4N64DL	1,1-Dichloroethene-d2	131	55-104
Y4N64	Chloroform-d	125	78-121
Y4N58	Benzene-d6	129	77-124
Y4N62	Benzene-d6	129	77-124
Y4N64	Benzene-d6	231	77-124
Y4N65	Benzene-d6	143	77-124
Y4N66	Benzene-d6	131	77-124
Y4N70	Benzene-d6	135	77-124
· · · -	-		•

<u>Sample</u>	<u>DMC</u>	% Recovery	QC Limit
Y4N73	Benzene-d6	124	77-124
Y4N64	1,2-Dichloropropane-d6	156	79-124
. Y4N64	Toluene-d8	195	77-121
Y4N65	Toluene-d8	123	77-121
Y4N66	Toluene-d8	126	77-121
Y4N70	Toluene-d8	122	77-121
Y4N64	trans-1,3-Dichloropropene-d4	153	73-121
Y4N64	1,1,2,2-Trichloroethane-d2	128	73-125

Detected results for affected analytes where DMC recoveries fell below QC limits may be biased low; where results are nondetected, false negatives may exist. Detected results for affected analytes where DMC recoveries exceeded QC limits may be biased high. For DMC recoveries that exceeded QC limits, only detected results for associated analytes are qualified. Recoveries for DMCs vinyl chlorided3, 1,2-dichloropropane-d6, trans-1,3-dichloropropene-d4, and 1,1,2,2-tetrachloroethane-d2 exceeded QC limits but associated sample results were not qualified because they were nondetects. The samples were not reanalyzed undiluted.

Surrogates (e.g., deuterated monitoring compounds (DMCs)) are organic compounds which are similar to the target analytes in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples. All samples are spiked with DMCs prior to purging. DMCs provide information about both the laboratory performance on individual samples and the possible effects of the sample matrix on the analytical results.

- F. Results for the following analytes are qualified as estimated due to low internal standard (IS) areas and are flagged "J" in Table 1A.
 - All analytes except trichloroethene in sample Y4N58
 - All analytes except tetrachloroethene in sample Y4N59

{Chlorobenzene-d5}

1,1,1-Trichloroethane, cyclohexane, carbon tetrachloride, benzene, , methylcyclohexane, 1,2-dichloropropane, bromodichloromethane, cis-1,3-dichloropropane, 4-methyl-2-pentanone, toluene, trans-1,3-dichloropropene,
 1,1,2-trichloroethane, 2-hexanone, dibromochloromethane, 1,2-dibromoethane, chlorobenzene, ethylbenzene, o-xylene, m,p-xylenes, styrene, isopropylbenzene, and 1,1,2,2-tetrachloroethane in sample Y4N64

{1,4-Dichlorobenzene-d4}

• Bromoform, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene in samples Y4N57, Y4N61, Y4N64, and Y4N66

IS areas outside QC limits are shown below.

<u>Sample</u>	Internal Standard	<u>Area</u>	QC Limit
Y4N57	1,4-Dichlorobenzene-d ₄	37738	44804-104544
Y4N58	1,4-Dichlorobenzene-d ₄	32311	44804-104544
Y4N58	1,4-Difluorobenzene	149475	154276-359978
Y4N58	Chlorobenzene-d5	86241	100090-233542
Y4N59	1,4-Dichlorobenzene-d4	31822	44804-104544
Y4N59	1,4-Difluorobenzene ·	149179	154276-359978
Y4N59	Chlorobenzene-d5	84195	100090-233542
Y4N61	1,4-Dichlorobenzene-d4	43896	44804-104544
.Y4N64	1,4-Dichlorobenzene-d4	36159	44804-104544
Y4N64	Chlorobenzene-d5	55034	100090-233542
Y4N66	1,4-Dichlorobenzene-d4	40644	44804-104544

Detected results and quantitation limits for the affected analytes are considered quantitatively questionable. Where results are nondetected, false negatives may exist. The samples were not reanalyzed undiluted.

Internal standards, introduced into every calibration standard, blank, sample, and QC sample, monitor changes in analyte response due to matrix effects and fluctuations in instrument sensitivity throughout the analytical sequence. Internal standards are used to quantitate the concentration of target analytes and surrogate standards.

G. The matrix spike/matrix spike duplicate percent recoveries for trichloroethene in QC samples Y4N73MS (140%) and Y4N73MSD (132%) did not meet the criterion for accuracy (71-120%) specified in the SOW. These recoveries are not meaningful because the concentration of trichloroethene in sample Y4N73 (68 ug/L) is significantly higher than the spike concentration of 5.0 ug/L.

Matrix spike sample analysis provides information about the effect of the sample matrix on sample preparation and measurement.

H. Sample Y4N57 was reanalyzed at a 4-fold dilution due to high levels of trichloroethene and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y4N57 are reported from the diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

Samples Y4N58, Y4N69, and Y4N73 were reanalyzed at 8-, 5-, and 5-fold dilutions, respectively, due to high levels of trichloroethene that exceeded the calibration range. Results for trichloroethene in samples Y4N58, Y4N69, and Y4N73 are reported from the diluted analyses in Table 1A; results for other analytes are reported from the undiluted analyses.

Samples Y4N59, Y4N60, Y4N61, Y4N62, and Y4N66 were reanalyzed at 5-, 2-, 4-, 10-, and 10-fold dilutions, respectively, due to high levels of tetrachloroethene that

exceeded the calibration range. Results for tetrachloroethene in samples Y4N59, Y4N60, Y4N61, Y4N62, and Y4N66 are reported from the diluted analyses in Table 1A; results for other analytes are reported from the undiluted analyses.

Sample Y4N64 was reanalyzed at an 80-fold dilution due to high levels of trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, cis-1,2-dichloroethene, chloroform, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y4N64 are reported from the diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

Sample Y4N65 was reanalyzed at a 25-fold dilution due to high levels of 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y4N65 are reported from the diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

Sample Y4N68 was reanalyzed at a 2-fold dilution due to high levels of 1,1,2-trichloro-1,2,2-trifluoroethane and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y4N68 are reported from the diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

Sample Y4N70 was reanalyzed at a 20-fold dilution due to high levels of trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y4N70 are reported from the diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

I. Data users should note that the diluted concentrations for tetrachloroethene in the following samples are significantly lower than the undiluted concentrations.

		<u>Undiluted</u>	Diluted
Sample .	<u>Analyte</u>	Conc., µg/L	Conc., µg/L
Y4N60	Tetrachloroethene	28	15
Y4N64	Tetrachloroethene	1800	1000
Y4N65	Tetrachloroethene	200	130
Y4N66	Tetrachloroethene	120	78
Y4N68	Tetrachloroethene	21	9
Y4N70	Tetrachloroethene	180	110 .

Page 1 of 10 Case No.: 38274 SDG No.: Y4N51 Table 1A

Site: OMEGA CHEMICAL OU2 Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC

Date: 05/04/09

QUALIFIED DATA Concentration in ug/L Analysis Type :

Trace Level Water Samples

Station Location:	MW3			MW7			^MW11			MW21			1			2		
Sample ID :	Y4N51			Y4N52			Y4N53			Y4N55			Y4N56			Y4N57		
Collection Date :	3/2/2009			3/2/2009			3/2/2009			3/2/2009			3/3/2009			3/3/2009		
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
Dichlorodifluoromethane	0.50U	J	Ε	0.50U			0.50U			0.50U			0.50U			0.50U		
Chloromethane	0.50U	Ĵ	Ε	0.50U			0.50U			0.50U			0.50U			0.50U		
Vinyl chloride	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromomethane	0.50U	J	E	0.50U			0.50U			0.50U			0.50U			0.50∪		
Chloroethane	0.50U	J	E	0.50U			0.50U			0.50U		20.0	0.50U			0.50U		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Trichlorofluoromethane	0.50U			0.50∪			0.50U			0.50U		A.A.	0.50U		atamatana	2.1		
1,1-Dichloroethene	0.50U			0.50U			0.50U			0.22L	J	Α	0.50U			3.0	J	Ε
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50U			0.40L	Ĵ	Α	0.50U		1	0.50U		and the second second	0.50U			4.5		
Acetone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0U		
Carbon disulfide	0.50U	Ĵ	E	0.50U	2.22.2		0.50U			0.50U			0.50U			0.50U		
Methyl acetate	0.50U			0.50U			0.50U			0.50∪			0.50U			0.50U		
Methylene chloride	0.50U			0.50U			0.50U		-	0.50U			0.50U			0.50U		
trans-1,2-Dichloroethene	0.50U	•		0.50U			0.50U			0.50U			0.50U			0.50U		
Methyl tert-butyl ether	0.50U			0.50U	Transfer of		0.50U			0.50U	along the to	200	0.50U			0.50U	Che i senera sen	
1,1-Dichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50∪		
cis-1,2-Dichloroethene	0,50U	3 (A)		0.50U			0.50U	a mod mili		0.50U		285 184 19 245 194 195 28 194 195 195	0.50U	د دافلافارا		0.37L	j	ΑE
2-Butanone	5.0U			5.0U			5.0U	J	С	5.0U	J	С	5.0U	J	С	5.0U	J	С
Bromochloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloroform	0.50U			0.50U			0.50U			0.95U	J	В	0.50U			0.50U	J	В
1,1,1-Trichloroethane	0.50U	7		0.50U			0.50U			0.50U			0.50U			0.50U	21.5	
Cyclohexane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Carbon tetrachloride	0.50U			0.50U			0.50U		3	0.50U			0.50U			0.50U		
Benzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50∪		
1,2-Dichloroethane	0.50U		2	0.50U		27.17.120	0.50U			0.50U	7	2012.00	0.50U			0.50U	alignate destructions	
Trichloroethene	0.50U	as a relation . Papergarge		0.50U			0.50U	30 - P 12 9	and the second section	0.50U	Constitution of the consti	5- 1- (a. e.).	0.90			44	FARM CORE	Н
Methylcyclohexane	0.50U	The said		0.50U	in the desired from	10 m	0.50U			0.50U	Comment or many to	ra je robje i v Transki silo	0.50U		7	0.50U		4.71

Case No.: 38274 SDG No.: Y4N51 Table 1A

Site: OMEGA CHEMICAL OU2
Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC QUALIFIED DATA Analysis Type: Trace Level Water Samples

Date: 05/04/09 Concentration in ug/L

for Trace Volatiles

Page 2 of 10

Station Location:	MW3			MW7			MW11			MW21			1			2		
Sample ID :	Y4N51			Y4N52			Y4N53			Y4N55			Y4N56			Y4N57		ł
Collection Date :	3/2/2009			3/2/2009			3/2/2009			3/2/2009			3/3/2009			3/3/2009		
Dilution Factor:	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Vai	Com
1,2-Dichloropropane	0.50U			0.50U			0.50U		white control of	0.50U			0.50U		hi alaba alaba	0.50U		
Bromodichloromethane	0.50U			0.50U	to the state of th		0.50U		***************************************	0.50U	and a second	miles and	0.50U	and the state		0.50U		
cis-1,3-Dichloropropene	0.50U			0.50U			0.50U		to describe and a second	0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	5.0U	41.51.6		5.0U	and the	المعادلات الأك	5.0U	Sand disability	ر المراجعة المراجعة المراجعة المراجعة ال	5.0U		ah, dan, dan	5.0∪	2000 A	والمراكبين المراكب	5.0∪	عنه سداد	
Toluene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
trans-1,3-Dichloropropene	0.50U			0.50U	dender of		0.50U	J. 1		0.50U			0.50U	at attraction of	201	0.50U		iw water to the
1,1,2-Trichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Tetrachloroethene	0.50U			0.38L	J	Α	3.0			0.94	774	7 -	1.9		di Sun	30		H
2-Hexanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0∪		
Dibromochloromethane	0.50U			0.50U	مرسد		0.50U			0.50U			0.50U			0.50U		
1,2-Dibromoethane	0.50U			, 0.50U			0.50U			0.50U			0.50U			0.50U		
Chlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Ethylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
o-Xylene	0.50U			0.50U		\hat{a}	0.50U	\$1354 \$1354		0.50U		بهد میلادانا. ایمار میلادانا	, 0.50U			0.50U	ا الفائد المارات	
m,p-Xylene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Styrene	0.50U			0.50U		TO THE	0.50U			0.50U			0.50∪			,0.50U		
Bromoform	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U	J	F
Isopropylbenzene	0.50U			0.50U			0.50U			0.50U	3	7-	0.50∪			0.50U		
1,1,2,2-Tetrachloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,3-Dichlorobenzene	0.50U	4 T		0.50U	5 T 6		0.50U			0.50U		200	0.50U	, ,		0.50U	J	F.
1,4-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U		l	0.50U	J	F
1,2-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U	J	F
1,2-Dibromo-3-chloropropane	0.50U	-		0.50U			0.50U			0.50U		l	0.50U			0.50U	J	F
1,2,4-Trichlorobenzene	0.50U			0.50U	že_		0.50U			0.50∪		1212 6	0.50∪	15172, 15 LJ (1334)		0.50∪	J.	F
1,2,3-Trichlorobenzene	0.50U	and the second		0.50U		,	0.50U			0.50U			0.50U			0.50∪	J	F
			The The			The state of the s								$\{F_i\}$	A Second			Anna Anna

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation LImit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

Case No.: 38274

SDG No.: Y4N51

Table 1A

Site: OMEGA CHEMICAL OU2
Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC

Date: 05/04/09

QUALIFIED DATA

Concentration in ug/L

Analysis Type :

Trace Level Water Samples

Station Location :	3	,		4	•		5		•	6			7	_		8		
Sample ID :	Y4N58			Y4N59			Y4N60		D1	Y4N61		D1	Y4N62			Y4N63		FΒ
Collection Date :	3/3/2009			3/3/2009			3/3/2009			3/3/2009			3/3/2009			3/3/2009		ļ
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
Dichlorodifluoromethane	0.50U	J	F	0.50U	J	F	0.50U			0.50U			0.50U			0.50U		
Chloromethane	0.50U	J	F	0.50U	ٔ ل	F	0.50U	. Landania	المارية المارية المارية	0.50U	* 100 0 000 0 000		0.50U			0.50U	-	S C
Vinyl chloride	0.50U	J	F	0.50U	J	F	0.50U	-		0.50U	4		0.50U			0.50U		
Bromomethane	0.50U	J	F	0.50U	J	F	0.50U	and produce and produce and the	17 3 3 Z	0.50U	Table 1	arter or a law or arter	0.50U			0.50U	nonem di ancesi	notion of one of
Chloroethane	0.50U	J	F	0.50U	J	F	0.50U			0.50U			0.50U		1	0.50U		
Trichlorofluoromethane	0.84	J	F	0.50U	J	F	0.50U	American services	La Bart	0.50U		To the first	0.50U			0.50U		7
1,1-Dichloroethene	0.67	J	EF	0.61	J	EF	0.44L	J	AE	0.52	J	Ε	2.5	J	E	0.50U		
1,1,2-Trichloro-1,2,2-trifluoroethane	1.6	J	F	0.30L	j	AF	0.50U			0.31L	J	Α	0.45L	J	Α	0.50U		
Acetone	5.0U	J	F	5.0U	J	F	5.0U			5.0U			5.0U			5.0U		
Carbon disulfide	0.50U	J	F	0.50U	J	F	0.50U			0.50U		المراجعة ا المراجعة المراجعة ال	0.50U	راد ما بادر میشا میرواند		0.50∪	Same area of the same of	
Methyl acetate	0.50U	J	F	0.50U	J	F	0.50U			0.50U			0.50U			0.50U		
Methylene chlonde	0.50∪	Ĵ	F	0.50U	J	F	0.50U			0.50U	January e. January		0.50U			∴ 0.50∪	Annual at	
trans-1,2-Dichloroethene	0.50U	J	F	0.50U	J	F	0.50U			0.50U		hab and take	0.50U			0.50U		<u> </u>
Methyl tert-butyl ether	0.50U	J	F	0.50U	J	∴ F	0.50U		A COST	0.50U		E X	0.50U			0.50∪	el error al se	14-11 14-11 14-11 14-11
1,1-Dichloroethane	0.50U	J	F	0.50U	J	F	0.50U		National of Parties .	0.50U			0.50U			0.50U		
cis-1,2-Dichloroethene	0.30L	J	AEF	2.7	J	EF	1.2	ل	Ē,	1.4	J	ΣE	2.6	J	E	0.50U		
2-Butanone	5.0U	J	CF	5.0U	J	CF	5.0U	J	С	5.0U	J	С	5.0U	J	С	5.0U	J	С
Bromochloromethane	0.50U	J	F	0.50U	J	F	0.50U			0.50∪			0.50U			0.50U		
Chloroform	0.64U	J	BF	0.50U	J	BF	0.50U	J	В	0.50U	J	В	0.50U	J	В	0.40L	J	Α
1,1,1-Trichloroethane	0.50U	Ĵ	F	0.50U	Ĵ	F	0.50U			0.50U	The same and the s		0.50U			0.50U	المنطقة	
Cyclohexane	0.50U	J	F	0.50U	J	F	0.50∪	per pa - 19pe - 1 for - 18p	program and the same of	0.50U			0.50U			0.50U	************	Company of the
Carbon tetrachloride	0.23L	Ĵ	AF	0.50U	J	F	0.50∪	A	200	0.50U	Name and Address of the American		0.50U			0.50U		
Benzene	0.50U	J	F	0.50U	J	F	0.50U		Trans. Spranera	0.50∪	The property of the	2000 000000	0.50U			0.50U		
1,2-Dichloroethane	0.50U	J	F	0.50U	J	F	0.50U		are often assert	0.50U		and the same	0.50U			0.50U		
Trichloroethene	79	J	Н	7.3	J	F	3.7		ACTION AND A ST	4.3		I AND AND THE SAME	20			0.50U	ate to start or according	larant .
Methylcyclohexane	0.50U	Ĵ	F	0.50U	J	F	0.50U	£ ,	30000000000000000000000000000000000000	0.50U			0.50U			0.50U		

Page 4 of 10 SDG No.: Y4N51 Table 1A Case No.: 38274

Site: OMEGA CHEMICAL OU2 Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC Analysis Type: Trace Level Water Samples **QUALIFIED DATA**

Date: 05/04/09 Concentration in ug/L

Station Location:	3			4			5			6			7.		-	8		
Sample ID :	Y4N58			Y4N59			Y4N60		D1	Y4N61		D1	Y4N62			Y4N63		FΒ
Collection Date :	3/3/2009			3/3/2009			3/3/2009			3/3/2009			3/3/2009			3/3/2009		
Dilution Factor:	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
,2-Dichloropropane	0.50U	J	F	0.50U	J	F	0.50U			0.50U	- modernment - man		0.50U			0.50U		the meaningments.
the same and the s			******	0.5011			0.501	in his contactor		0.5011		1-5-11 5-1-1-4	0.5011		20,000	O FOLL		Co acres acres,

Sample ID :	Y4N58			Y4N59			Y4N60		D1	Y4N61		D1	Y4N62			Y4N63		FB
Collection Date :	3/3/2009			3/3/2009			3/3/2009			3/3/2009			3/3/2009			3/3/2009		
Dilution Factor:	1.0			1.0		•	1.0			1.0			1.0			1.0		
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
1,2-Dichloropropane	0.50U	J	F	0.50U	J	F	0.50U			0.50U			0.50U			0.50U		
Bromodichloromethane	0.50U	J	F	0.50U	J	F	0.50U	man ne pravé ipa		0.50U			0.50U	3.050		0.50U		
cis-1,3-Dichloropropene	0.50U	J	F	0.50U	J	F	0.50U	**** 1-2 5-2 1		0.50U		a statement state of	0.50U			0.50U	in the same to be	
4-Methyl-2-pentanone	″ ∕ 5.0U	J	F	5.0U	J	F	5.0U	de lotanda	in an and an an a	5.0U	الأوالية ال المنافعة المنافعة الأوالية ال		5.0U	the The state of t		5.0U	وطور أدرون	
Toluene	0.50U	J	F	0.50∪	J	F	0.50U	The first the County of the St.		0.50U		and before bother a priority.	0.50U			0.50U		
trans-1,3-Dichloropropene	∜ 0.50U	J	F.	0.50U	J.	F	0.50U	Americania.	177	0.50U	المارية المارية	The second second	0.50U	and a second of	A Section of	0.50U	a solution and the	But week
1,1,2-Trichloroethane	0.50U	J	F	0.50U	J	F	0.50U	fortune to substant	on an arterior	0.50U	********		0.50U		man November of	0.50U		
Tetrachloroethêne	2.5		∴ F	49	Ĵ	H.	15		HI	ा / 33 ू	المرافق المرافق المرافق المرافق	(H	79		H	0.50U		
2-Hexanone	5.0U	J	F	5.0U	J	F	5.0U	10.000.000		5.0U	mov 2 not 2 not 2	nerstane, spen	5.0U		000.00	5.0U	the second sets	
Dibromochloromethane	0.50ป		F	0.50U	J	F	0.50U	مالقاد مند درانا	العراب المحالة	0.50U	الولى المرادة والمعادد المادة الم المادة المادة الماد	A STATE OF THE STA	0.50U			0.50U	ر از	
1,2-Dibromoethane	0.50U	J	F	0.50U	J	F	0.50U			0.50U	tanana tanahanaka	ar management	0.50U			0.50U		
Chlorobenzene	0.50U	J	F	0.50U	J	F	0.50U		* * * * *	0.50U	de de la		0.50U			0.50U		Lui A
Ethylbenzene	0.50U	J	F	0.50U	J	F	0.50U	Maria Sacrada Se Mari	of courts a source last	0.50U			0.50U	controllers to a fact to		0.50U		
o-Xylene	0.50U	J	F	0.50U	J	F	0.50U	 	المرابعة المساعدة المساعدة	0.50U			0.50U	and to reason the	and her states	0.50U	المناف الماسية	
m,p-Xylene	0.50U	J	F	0.50U	J	F	0.50U	W W W		0.50U			0.50U	and the second and the second		0.50U		
Styrene	0.50U	J	F	0.50U	ું ડ્ર <u>ુ</u>	F	0.50U	ائني اد ادا منتسطانا		0.50U			0.50U		and the second	0.50U		المستحد
Bromoform	0.50U	J	F	0.50U	J	F	0.50U	and the same of		0.50U	J	F	0.50U	and a Control of Springer Control	****	0.50U		
Isopropylbenzene	0.50U	J	F	0.50U	Ĵ	j. F ≏	0.50U		-	0.50U			0.50U	المنطقة والمنطاقة	ىدىنى ئىلىنىدىنىدىدىدىدىدىدىدىدىدىدىدىدىدىدىدىد	0.50U		الله الواد الله الله الله الله الله الله الله ال
1,1,2,2-Tetrachloroethane	0.50U	J	F	0.50U	J	F	0.50U	· · · · · · · · · · · · · · · · · · ·		0.50U			0.50U		National and the Bender's	0.50U	consistency, leave	*******
1,3-Dichlorobenzene	0.50U	J	F	0.50U	J	F	0.50U		دسست	0.50U	J	F	0.50U			0.50U		
1,4-Dichlorobenzene	0.50U	J	F	0.50U	J	F	0.50U	O 50 3000		0.50U	J	F	0.50U	-	war nen a dena	0.50U	er manager	
1,2-Dichlorobenzene	0.50U	<u>.</u> J	F	0.50U	ر ا	F	0.50U			0.50U	J	<u> </u>	0.50U	-		0.50U	422	
1,2-Dibromo-3-chloropropane	0.50U	J	F	0.50U	J	F	0.50U		~~~	0.50U	J	F	0.50U	engris eris	grick common pagents	0.50U	, etc. 54 art 15 state	and the second second second
1,2,4-Trichlorobenzene	0.50U	J	F	0.50U	Ĵ.	·F	0.50U	الله الله الله الله الله الله الله الله		0.50U	J	F	0.50U			0.50U	المارية معاملات على	
1,2,3-Trichlorobenzene	0.50U	J	F	0.50U	J	F	0.50U	10-1415-04111		0.50U	J	F	0.50U	more posterio	Lorda Moreo a	0.50U		*****
		3				Editor.		in the second	1	<i>y</i>		1						3

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation Limit

N/A - Not Applicable

NA,- Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

Case No.: 38274

SDG No.: Y4N51

Table 1A

Site: OMEGA CHEMICAL OU2 Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC

Date: 05/04/09

QUALIFIED DATA
Concentration in ug/L

Analysis Type:

Trace Level Water Samples

Station Location :	9			10		_	11	_		12			13			14		
Sample ID :	Y4N64			Y4N65			Y4N66			Y4N67		FB	Y4N68			Y4N69		
Collection Date :	3/4/2009			3/4/2009			3/4/2009			3/4/2009			3/5/2009			3/5/2009		
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
Dichlorodifluoromethane	0.50U			0.50U			0.50U			0.50U			0.50U		1	0.50U		
Chloromethaner	3.0.50U				1	3.00	€ (0!50U		* 1. The	0:50U:	11/10		0!50U		1	· 0:50Ü		
Vinyl chloride	0.50U			0.50U	1.7 2.30 - 2.30.20		0.50U	A. O. O. O. O. O.		0.50U	11.5 3 6 5 6 6		0.50U	2.07.370		0.50U		320041 2500
Bromomethane / /	0.500			0.500			0.500			0.500			0.50U			0,500		
Chloroethane	0.50U			0.50U	i.carraeros		0.50U			0.50U			0.50U			0.50U		
ilidiloolivoomelijänė	150 °		H	16		,	0.500			ଡ ଞ୍ଚରମ			143			0.500		
1,1-Dichloroethene	340	J	EH	44	J	EH	3.7	J	E	0.50U			18	J	E	4.8	J	E
1,1,2 Trichloro 1,22 trifluoroethane	420	小袋	出:	46	***	: 出:	/\`0.50U	1	2.	0.500	. 62		/ 19	1.00	, H	0.500		4
Acetone	45			15			5.0U	.,,,,,,,,		5.0U			5.0U			5.0U	, , ,	
Carbon disulfide	40.50U	·**		0.50U	121131		4 0.50Ú	. 3				湖湖	(0:50U)	1.00			1	
Methyl acetate	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		l
Methylene chloride	0.500			0.500			<u> </u>			0.500			0.500	2.2		0.500		
trans-1,2-Dichloroethene	2.0	J	Ε	0.62	J	E	0.50ป			0.50U			0.50U		Į.	0.50U		
Methyl tendoutyl ether	. OEOU			O.EQU			, o e o o	****		0.500	2		രളയ			OEEOU!		
1,1-Dichloroethane	1.0	J	E	0.28L	J	Α	0.50U			0.50U			0.50U			0.50U		
ds=1,2-Dichlorocitiene	170	1 0	国出	18	43	€.	0.821	30	, AŒ,	0.50V.			0£0U	10		107	7 00	. B
2-Butanone	5.0U	J	C	5.0U	J	С	5.0U	J	С	5.0U	J	С	5.0U	J	С	5.0U	J	С
Bromochloromethane	r 0.50U	1116		3 0.50U		AV.	\$ 0.50U			¥70:50U.		100	40.50U	100	200	0.50U	2.35	
Chloroform	62		H	7.1			0.50U	J	В	0.42L	J	Α	0.80U	J	В	0.50U		
in the vicinion of the results in the second	0!23L	i di	AF.	0.50U	200		0.500			0.50U			″ 0.50U	11.00		0. 50U		
Cyclohexane	0.50U	J	F	0.50U			0.50U			0.50U			/ 0.50U			0.50U		
Carbon tetrachloride	0.500	Ð	F	0.500			0.500			0.500	7.1	2	. O.SOU			0.500		
Benzene	0.44L	J	AEF	0.50U			0.50U			0.50U			0.50U			0.50U		
1,24Dichilorocultatie	4510			0.500	740		0.500			0.500	AM		യക്ക	17/0		0 500		
Trichloroethene	790		Н	220		Н	15	J	Е	0.50U			3.1			46		Н
Methylcyclonexane	0.50U	, JU	W.F.	2 0.50∪;	7		0\50U:	19.38	7	0.50U	378		0.50U	- AR		2 0:50U	A. 14	THE STATE OF

Page 6 of 10 SDG No.: Y4N51 Table 1A Case No.: 38274

Site: OMEGA CHEMICAL OU2 Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC **QUALIFIED DATA** Analysis Type: Trace Level Water Samples Concentration in ug/L

Date: 05/04/09

for Trace Volatiles

Station Location :	9			10			11			12			13			14		
Sample ID :	Y4N64			Y4N65			Y4N66			Y4N67		FB	Y4N68			Y4N69		
Collection Date :	3/4/2009			3/4/2009			3/4/2009			3/4/2009			3/5/2009			3/5/2009		
Dilution Factor:	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	Result	Val -	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
1,2-Dichloropropane	0.50U	J	F	0.50U	-		0.50U			0.50U			0.50U			0.50U		
Bromodichloromethane	0.50U	j	, F	0.50U			0.50U		abla to	0.50∪	All and the control of		0.50U			° 0.50U		
cis-1,3-Dichloropropene	0.50U	J	F	0.50U			0.50U			0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	5.0U	J T	F	5.0U		7	5.0U		المنسوري	5.0U			5.0∪			5.0U	and the same of	
Toluene	0.50U	J	F	0.50U			0.50U			0.50U			0.50U			0.50U		
trans-1,3-Dichloropropene	0.50U	j	F	0.50U		Service of	0.50U	10°	ماديد أوريد	0.50U	Jan	-	0.50U		1 i.	0.50U	به مسمد	
1,1,2-Trichloroethane	0.50U	J	F	0.50U			0.50U			0.50U		-	0.50U			0.50U		
Tetrachloroethene	1000	ا مالىنىدالىنىدالىد	HI	130	to a second seco	H	78	sementen de	· HI	0.50U		مد نست	9	illan w	HI	1.3	in the second	
2-Hexanone	5.0U	J	F	5.0U	Carrier was well as		5.0U	tur. Heliciber Home		5.0U			5.0U	Section But	22000000	5.0U	a mandraguna in compan	11-12-14-14-14-14-14-14-14-14-14-14-14-14-14-
Dibromochloromethane	0.50U	Ĵ	F	0.50U	ALL COM	200	0.50U	1	والمسائلة المالية	0.50∪	a sale and resident	ا مان غادمند	0.50U	لم ما ما		0.50U	ا درین استفاده از ایر	
1,2-Dibromoethane	0.50U	J	F	0.50U			0.50U			0.50U			0.50U			0.50U		
Chlorobenzene	0.50U	ູ່ປຸ	F	ຼ່ 0.50ປ	and head	19 79 19	0.50U	السريو المساد	1746	0.50U	4	الي الم الا المستسملة	0.50U		. 10 ; % ; % <u>~</u> ————————————————————————————————————	0.50U	المدعنة شاه	tu land
Ethylbenzene	0.50∪	J	F	0.50U		Acres and so	0.50∪			0.50U			0.50U	mod study to to to		0.50U	- > > > > > > > > > > > > > > > > > > >	- confirmation between
o-Xylene	0.50U		F	0.50U			0.50U	ي د آدا ڪند ڪيڪ	-	0.50⊍			0.50U		1. "	0.50U	A Company	
m,p-Xylene	0.50∪	J	F	0.50U			0.50U	~~~~		0.50U			0.50U			0.50U	no common property and	**********
Styrene	0.50ป	J	F	0.50U			0.50∪	تسفست		0.50U	المراجعة الما	1, 1)	0.50U			0.50U		
Bromoform	0.50U	J	F	0.50U	gar on physic county		0.50U	J	F	0.50U	ar commonweal	an and proper solvers relay.	0.50U	per region or or organize		0.50U		i agricania, morale
Isopropylbenzene	0.50U	ِي لَا إِنْ	L.F.	0.50U	0.13 2.43 2.42.43	2 1	0.50U		e Jakalana	0.50U	المُقْدَمَدُ مَا		0.50U	e de la companya de La companya de la co	بالمال المالية	0.50U	A. Milwan	از . گذشته از شدگ
1,1,2,2-Tetrachloroethane	0.50∪	J	F	0.50U	1 paradist in type	i om vicana ori	0.50U	Note interested	contratts it muchadon.	0.50U	o management	maring states and	0.50∪	no en en en en	constraint on	0.50U	r occurs result com	- TRACTIONAL TO P
1;3-Dichlorobenzene	0.50U	J	逐步发	0.50∪			0.50U	ัป	F	0.50U			0.50U			€ 0.50U		
1,4-Dichlorobenzene	0.50U	J	F	0.50U		~~~~~	0.50U	J	F	0.50U		and an advent from ,	0.50U		121121	0.50U	and a second second	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1,2-Dichlorobenzene	0.50U	J	F	0.50U	7. 2	المناسبة	0.50U	رز	F	0.50U			0.50U		-	0.50U		
1,2-Dibromo-3-chloropropane	0.50U	J	F	0.50U	Charles a strain		0.50U	J	F	0.50U			0.50U			0.50U	th /abst : messa.	
1,2,4-Trichlorobenzene	0.50U	J	F	0.50U	And the second second		0.50U	. ال	F	0.50U		-1004	0.50U			0.50U		
1,2,3-Trichlorobenzene	0.50U	J	F	0.50U	0-200-1-		0.50U	J	F	0.50U	le sur et samuels fact		0.50U	Arichele better by		0.50U	المدادر من بوالوسوي	10010040000
		द्वा प्रतिहेता अस्ति प्रतिहेता	g programme. As design			9 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		1,3 4. 4.	4.4		j							$\mathcal{F}_{i} = \mathcal{F}_{i}$

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation Limit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

Case No.: 38274

SDG No.: Y4N51

Table 1A

Site: OMEGA CHEMICAL OU2 Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC

Date: 05/04/09

QUALIFIED DATA
Concentration in ug/L

Analysis Type :

Trace Level Water Samples

Station Location:	15	•	_	18			Method Bla	ank		Method Bla	ank		Method Bla	ank		Method Bla	ank	
Sample ID :	Y4N70			Y4N73			VBLK5Q			VBLK5S			VBLK5T			VBLK5U		
Collection Date:	3/5/2009			3/5/2009						•								
Dilution Factor:	1.0			1.0			1.0			1.0			1.0			1.0		
· Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
Dichlorodifluoromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloromethane	0.50U	bus believes and		0.50U			0.50U	- Anna Carana		0.50U		and a comment	0.50U			0.50U	-	
Vinyl chloride	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromomethane	0.50U			0.50∪	200 CH		0.50U			0.50U		×	0.50∪			0.50U		
Chloroethane	0.50U			0.50∪			0.50U			0.50U			0.50U		1	0.50U	l	Ì
Trichlorofluoromethane	45		H	2.3			0.50U		18 10 10 10 10 10 10 10 10 10 10 10 10 10	0.50U		A - 1	0.50U			0.50U		, 7 c
1,1-Dichloroethene	100	J	EH	5.1	J	Е	0.50U			0.50∪			0.50U			0.50U		
1,1,2-Trichloro-1,2,2-trifluoroethane	. 95		Н	7.1	And the second second	Marrie Communication	″ 0.50U	error programmer open		0.50∪	-	and the same of the same	0.50U			0.50U		4
Acetone	30			5.0U			5.0U			5.0U			5.0U			5.0U		
Carbon disulfide	0.50U			0.50U			0.50U			0.50∪	,		0.50U			0.50U		
Methyl acetate	0.50U			0.50∪			0.50U			0.50U			0.50U	l		0.50U		
Methylene chloride	0.50U	version and		0.50U			0.50U		and the same of	0.28L	J	Α	0.24L	J	Α	0.23L	J	Α
trans-1,2-Dichloroethene	0.20L	J	Α	0.50U			0.50U			0.50U			0.50U			0.50U		
Methyl tert-butyl ether	0.50U			0.50∪			0.50U		of a charact	0.50U	America et al.	2	0.50U			0.50U		
1,1-Dichloroethane	0.37L	J	Α	0.50U			0.50U			0.50U			0.50U			0.50U	l'	
cis-1,2-Dichloroethene	2.1			0.42L	J	AE	0.50U			0.50∪	daniela n		0.50∪			0.50U		المراجعة المراجعة المستخدمة
2-Butanone	5.0U	J	С	5.0U			5.0U		, .,	5.0U	J	С	5.0U	J	С	5.0U		
Bromochloromethane	0.50U			0.50∪	Capital Services		0.50U		و ساخت کردها	0.50U			0.50U			0.50U	المستنسوة	
Chloroform	15			1.1			0.50U			0.50U			0.50U			0.50U		
1,1,1-Trichloroethane	0.50U			0.50U		,	0.50U	***********		0.50U			0.50U			0.50U		
Cyclohexane	0.50U			0.50U	- Some manager day		0.50U			0.50∪			0.50U	1		0.50U		
Carbon tetrachloride	0.50U			0.50Ú	eli kii		0.50U		*********	0.50U			0.50U			0.50U		
Benzene	0.50U			0.50U			0.50U			0.50U			0.50U	I		0.50U	I	
1,2-Dichloroethane	1.7	a an administrative		0.50U	30 m m m m m m m m m m m m m m m m m m m		0.50U	christicaens are	2.50	0.50U		the continuous of	0.50U			0.50U		
Trichloroethene	100	a	Н	68	2 1 - 2 1 2 M M	HG	0.50U	and the same		0.50∪	1100 0000		0.50U			0.50U		
Methylcyclohexane	0.50U			0.50U		angenger Talah	0.50U			0.50U	Anna Anna An	Section Section 2	0.50U	وأدوان وا	777	0.50U	The second	7. 7.

- Case No.: 38274

SDG No.: Y4N51

Table 1A

Site: OMEGA CHEMICAL OU2 Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC

Date: 05/04/09

QUALIFIED DATA
Concentration in ug/L

Analysis Type :

Trace Level Water Samples

for Trace Volatiles

Station Location :	15			18			Method Bla	ank		Method Bla	ank	· ·	Method Bla	ank		Method Bla	ink	•
Sample ID :	Y4N70			Y4N73			VBLK5Q			VBLK5S			VBLK5T			VBLK5U		
Collection Date :	3/5/2009			3/5/2009														
Dilution Factor:	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
1,2-Dichloropropane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromodichloromethane	0.50U			0.50U	,		0.50U	رعمردددی	4 4	0.50U			0.50U			0.50U	7	
cis-1,3-Dichloropropene	0.50U	The state of the s		0.50U			0.50U			0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	5.0U	¥1775.		5.0U			5.0U			5.0U			5.00			5.0∪	8.362	
Toluene	0.50U	W 2.124 43.151. (C	1 1 1 1 1 1 1 1 1 1	0.50U			0.50U		2,307,111,1112	0.50U		property and the	0.50U			0.50U		
trans-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U	- S.	333
1,1,2-Trichloroethane	0.50U	Total Ligari	2127 14 2 2 4 1 2 1 1 1 1	0.50U			0.50U			0.50U		4,224,14	0.50U		17 1410 1-1410	0.50U		
Tetrachloroethene	110		H	18	· » · ·		0.50U			0.50U			0.50U		7.17	0.50U	7	
2-Hexanone	5.0U			5.0U	3.0.3		5.0U			5.0U			5.0U		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5.0U		
Dibromochloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		2.7
1,2-Dibromoethane	0.50U			0.50U	33.0.200		0.50U			0.50U		30.003000	0.50U			0.50U	330.00	
Chlorobenzene	0.50U		40,000	0.50U			0.50U			0.50U		1 4 4	0.50U			0.50U		
Ethylbenzene	0.50U		122000.10	0.50U			0.50U			0.50U			0.50U			0.50U		
o-Xylene	0.50U			0.50U	2		0.50U		عديد	0.50U			0.50U	TOTAL Sections		0.50U		
m,p-Xylene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		1
Styrene /	0.50Ŭ	SELV. S. X		0.50U			0.50∪			0.50U			0.50U			→ 0.50U		
Bromoform	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Isopropylbenzene	0.50U			0.50U	9		0.50U			0.50Ü			0.50U			0.50U	7	
1,1,2,2-Tetrachloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		l !
1,3-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		8
1,4-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U		`	0.50U			0.50U		
1,2-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dibromo-3-chloropropane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2,4-Trichlorobenzene	0.50U			0.50ป			0.50U			0.50U	LAZEN.		0.50U	and the second		0.50U	1000	
1,2,3-Trichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
				STATEM.				不過光										

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation Limit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

Page 9 of 10 Case No.: 38274 SDG No.: Y4N51 Table 1A

Site: OMEGA CHEMICAL OU2 Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC

Date: 05/04/09

QUALIFIED DATA Concentration in ug/L Analysis Type :

Trace Level Water Samples

Station Location :	Method Bla	ank		Method Bla	ank		Storage BI	ank										
Sample ID :	VBLKB5			VBLKC5			VHBLKC5			CRQL								
Collection Date :																		
Dilution Factor :	1.0			1.0	_		1.0											
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
Dichlorodifluoromethane	0.50U			0.50U			0.50U			0.50								
Chloromethane	0.50U	Name Toward Street		0.50U	at almin is		0.50U	in the second second		0.50					and a soften softe			
Vinyl chloride	0.50U			0.50U			0.50U			0.50								
Bromomethane	0.50U	93		0.50U	Ĵ	D	0.50U	່ ປ	D	0.50		15 .5.	an almanda sabaran	and the second second				an in the same of
Chloroethane	0.50U			0.50U			0.50U			0.50								
Trichlorofluoromethane	0.50U			0.50U	7-4-2		0.50U			0.50								
1,1-Dichloroethene	0.50U			0.50U			0.50U			0.50								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50U			0.50U			0.50U			0.50							7	
Acetone	5.0U			5.0U			5.0U			5.0								
Carbon disulfide	0.50U			0.50U			0.50U			0.50								
Methyl acetate	0.50U			0.50U			0.50U			0.50				-				
Methylene chloride	0.50U			0.21L	Ĵ	Α	0.50U	J	В	0.50								
trans-1,2-Dichloroethene	0.50U			0.50U	10-10-1-1		0.50U			0.50								
Methyl tert-butyl ether	0.50U			0.50U		Y ** * ***	0.50U	Array Character		0.50		/						
1,1-Dichloroethane	0.50U			0.50U			0.50U			0.50								
cis-1,2-Dichloroethene	0.50U			0.50U			0.50U			0.50								
2-Butanone	5.0U			5.0U			5.0U			5.0								
Bromochloromethane	0.50U			0.50U			0.50U			0.50				,				
Chloroform	0.50U	J4.1.J4	37 (202)(00)	0.50U			0.50U		- 200.000	0.50	34334,337,						12 27 20 20	
1,1,1-Trichloroethane	0.50U			0.50U	Annual .		0.50U	7		0.50	,							
Cyclohexane	0.50U			0.50U	at out acces		0.50U	11.00.00.00.00.00	7.1440.00	0.50	2 01 30133	2001201201						
Carbon tetrachloride	0.50Ü	angangan Sebesa		0.500		ing in a Note that	0.50U	* 1000		0.50								
Benzene	0.50U			0.50U			0.50U			0.50						The second secon		
1,2-Dichloroethane	0.50U	***************************************	ger of a trace stage of the	0.50U		Pari for 11 Source Ta	0.50U	7.	Committee Committee Committee	0.50							i gadoriu gunteri	- come and
Trichloroethene	0.50U	a server en eur en en en en	, companyed a company	0.50U	are the other		0.50U			0.50						permitty of the processing of	1	
Methylcyclohexane	0.50U		A STATE OF THE STA	0.50U		20.00	0.50U		.,	0.50	-		tem etini jeti ini et içiniyi	- company recognition		***************************************		-,

QUALIFIED DATA

Page 10 of 10 Case No.: 38274 SDG No.: Y4N51 Table 1A

Site: OMEGA CHEMICAL OU2 Lab: MITKEM LABORATORIES

Reviewer: April Martinez, ESAT/LDC

Date: 05/04/09 Concentration in ug/L Analysis Type :

Trace Level Water Samples

for Trace Volatiles

Station Location :	Method Bla	ank		Method Bi	ank		Storage Bl	ank					<u> </u>					
Sample ID :	VBLKB5			VBLKC5			VHBLKC5			CRQL								
Collection Date :													1					
Dilution Factor :	1.0			1.0			1.0								-			
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
1,2-Dichloropropane	0.50U	I contravence.		0.50U	· Andrews of the state of the	r Names dedicates	0.50U	Navas (green menter)	e prima prominga	0.50	Na Spiriter and American	* **** *** **	agency - Systematysts everywhere	angular tanna ay ay sana sana sa	Tongeneral and make	and the last of the last of the last of	, rivegeningsen, er enhans	and the second s
Bromodichloromethane	0.50U			0.50U		ا المراجعة معاملة المراجعة	0.50U	ائن برداد الماد معاد المصححة		0.50	,	a a tra			کی را دی. غماندست			
cis-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50				<u> </u>				i
4-Methyl-2-pentanone	5.0U		-	5.0U	i de la compania del compania del compania de la compania del la compania de la compania del la compania d	and T	5.0U	***************************************	S. S.	5.0			an are described as an		*		,	ر المحدد المحدد
Toluene	0.50U			0.50U			0.50U			0.50								
trans-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50								
1,1,2-Trichloroethane	0.50U			0.50U			0.50U			0.50								
Tetrachloroethene	0.50U			0.50U			∜ 0.50∪			0:50			N. G. Park	477	5000			是
2-Hexanone	5.0U	ga resolution responsibility		5.0U			5.0U			5.0							2000	
Dibromochloromethane	0.50U			0.50U	Anna de la constante de la con	., ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.50U			0.50								
1,2-Dibromoethane	0.50U			0.50U	2213413432	11.74.15.24	0.50U		31.004,2.	0.50								
Chlorobenzene	0.50U			0.50U			0.50U	4	2.77	0.50							***************************************	
Ethylbenzene	0.50U	400 1400		0.50U	and and an analysis		0.50U	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- Constant	0.50								
o-Xylene	0.50U			0.50U			0.50U			0.50	4							
m,p-Xylene	0.50U			0.50U			0.50U			0.50						STATE OF THE SECOND		
Styrene	0.500		20 V V 2000 Pac	0.50U			0.50∪			0.50				4.14			alete da	77778 3. 120. s.
Bromoform	0.50U		. , , , , , , , , , , , , , , , , , , ,	0.50U			0.50U			0.50					12.2.2.3			,,,,,,,
Isopropylbenzene	0.50U			0.50U	315.50 A		0.50U			0.50 /4	PENTY.			270				777
1,1,2,2-Tetrachloroethane	0.50U			0.50U		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.50U			0.50								
1,3-Dichlorobenzene	0.50U			0.50U		Contraction of the Contraction o	0.50U			0.50		100001000			7777	A STATE OF THE STA	7	
1,4-Dichlorobenzene	0.50U	CD C COLUMN		0.50U	Co. Paris		0.50U	a Application		0.50		2222						
1,2-Dichlorobenzene	0.50U		7	0.50U	200	1 - 12 - 2 SayNeth	0.50U			0.50			2		200 mg		7	
1,2-Dibromo-3-chloropropane	0.50U			0.50U	north man ann, harrier a		0.50U		and the latest and th	0.50			Art - Arth - Phritis anguiga anguiga			The second secon		
1,2,4-Trichlorobenzene	0.50U	Mrs. Name		0.50U			0.50U	4		0.50	4		F. 19. 1.16					
1,2,3-Trichlorobenzene	0.50U	are to a second section of the second section of the second second section of the second section secti	and the second	0.50U	nai kadilahinni	المسيحة الميداد الم	0.50U	Carrata per decision	ja sags gant teknisk	0.50		t and the second second	The section of the se		andanin' mad	The found of the first sections of the section of t	mini promonen	To and the of a second
		engergigg Tilen ed		Charles II	0.5000		200 Page 1		100 m	5367235 To	1.15	700000		13/2/1				70.5

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation Limit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," January 2005.

- U The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
- L Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.
- The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
- R The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Table 2 Calibration Summary

Case No.: 38274 SDG No.: Y4N51

Site: Omega Chem OU2 Laboratory: Mitkem Laboratories

Reviewer: April Martinez, ESAT/LDC

Date: May 4, 2009

RELATIVE RESPONSE FACTORS (RRF)

				6	
	<u>RRF</u>	<u>RRF</u>	<u>RRF</u>	<u>RRF</u>	<u>RRF</u>
Analysis date:	3/5/09	3/5/09	3/9/09	3/9/09	3/10/09
Analysis time:	10:38-	21:02	10:09	21:10	09:06
GC/MS I.D.:	V5	V5	V5	V5	V5
<u>Analyte</u>	<u>Init.</u>	<u>CCV</u>	<u>CCV</u>	<u>CCV</u>	<u>CCV</u>
2-Butanone			0.049	0.044	0.045
2-Butanone-d5	0.044	0.038	0.043	0.039	0.038
2-Hexanone-d5	0.032	0.033	0.041	0.044	0.033
	<u>RRF</u>	<u>RRF</u>	•		
Analysis date:	3/12/09	3/10/09			
Analysis time:	10.20	20.20			
	18:30-	20:28			
GC/MS I.D.:	18:30- V5	20:28 V5			
GC/MS I.D.: Analyte			`		
	V5	V5			
Analyte	V5	V5	`		

ASSOCIATED SAMPLES AND METHOD BLANKS

Initial 03/05/09: All samples and method blanks VBLK5Q, VBLK5S, VBLK5T, and

VBLK5U

CCV, 03/05/09 (21:02): Y4N51, Y4N52, and VBLK5Q

CCV, 03/09/09 (10:09): Y4N53, Y4N55, Y4N56, and VBLK5S

CCV, 03/09/09 (21:10): Y4N53, Y4N55, Y4N56, and VBLK5S; Y4N57 through Y4N70 and

VBLK5T

CCV, 03/10/09 (09:06): Y4N57 through Y4N70 and VBLK5T; Y4N73, Y4N73MS,

Y4N73MSD, and VBLK5U

CCV, 03/10/09 (20:28): Y4N73, Y4N73MS, Y4N73MSD, and VBLK5U

Initial 03/05/09: Y4N57DL through Y4N70DL, Y4N73DL, VBLKB5, VBLKC5, and

VHBLKC5

CCV, 03/13/09 (09:03): Y4N57DL through Y4N70DL, Y4N73DL, VBLKB5, VBLKC5, and

VHBLKC5

Table 9. Volatile Deuterated Monitoring Compounds (DMCs) and the Associated Target Compounds

Chloroethane-d, (DMC)	1,2-Dichloropropane-d ₆ (DMC)	1,2-Dichlorobenzene-d ₄ (DMC)
Dichlorodifluoromethane	Cyclohexane	Chlorobenzene
Chloromethane	Methylcyclohexane	1,3-Dichlorobenzene
Bromomethane	1,2-Dichloropropane	1,4-Dichlorobenzene
Chloroethane	Bromodichloromethane	1,2-Dichlorobenzene
Carbon disulfide		1,2,4-Trichlorobenzene
	· ·	1,2,3-Trichlorobenzene
trans-1,3-Dichloropropene-d4 (DMC)	Chloroform-d (DMC)	2-Hexanone-d, (DMC)
cis-1,3-Dichloropropene	1,1-Dichloroethane	4-Methyl-2-pentanone
trans-1,3-Dichloropropene	Bromochioromethane	2-Hexanone
1,1,2-Trichloroethane	Chloroform	
	Dibromochloromethane	
	Bromoform	
2-Butanone-d ₅ (DMC)	1,1-Dichloroethene-d2 (DMC)	1,1,2,2-Tetrachloroethane-d ₂ (DMC)
Acetone	trans-1,2-Dichloroethene	1,1,2,2,-Tetrachlororethane
2-Butanone	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane
	cis-1,2-Dichloroethene	
Vinyl chloride-d ₃ (DMC)	Benzene-d ₆ (DMC)	Toluene-d _s (DMC)
Vinyl chloride	Benzene	Trichloroethene
Vinyl chloride	Benzene	Trichloroethene Toluene
Vinyl chloride	Benzene	
Vinyl chlonde	Benzene	Toluene
Vinyl chloride	Benzene	Totuene Tetrachloroethene
Vinyl chloride	Benzene	Toluene Tetrachloroethene Ethylbenzene
Vinyl chloride	Benzene	Toluene Tetrachloroethene Ethylbenzene o-Xylene
Vinyl chloride	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m,p-Xylene
Vinyl chloride 1,2-Dichloroethane-d4 (DMC)	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
l,2-Dichloroethane-d4 (DMC)	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
1,2-Dichloroethane-d4 (DMC) Trichlorofluoromethane	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
1,2-Dichloroethane-d, (DMC) Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-nifluoroethane	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
1,2-Dichloroethane-d ₄ (DMC) Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-trifluoroethane Methyl acetate	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
1,2-Dichloroethane-d ₄ (DMC) Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-trifluoroethane Methyl acetate Methylene chloride	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
1,2-Dichloroethane-d4 (DMC) Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-trifluoroethane Methyl acetate Methylene chloride Methyl-tert-butyl ether	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
1,2-Dichloroethane-d4 (DMC) Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-trifluoroethane Methyl acetate Methylene chloride Methyl-tert-butyl ether 1,1,1-Trichloroethane	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene
1,2-Dichloroethane-d ₄ (DMC) Trichlorofluoromethane 1,1,2-Trichloro-1,2,2-trifluoroethane Methyl acetate Methylene chloride Methyl-tert-butyl ether 1,1,1-Trichloroethane Carbon tetrachloride	Benzene	Totuene Tetrachloroethene Ethylbenzene o-Xylene m.p-Xylene Styrene

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA	A S.	AMP	LE	NO.	
Y4N.	57				
•					

Lab Name: MITKEM LABORATORIES	Contract: EP-W-05-030
Lab Code: MITKEM Case No.: 38274	Mod. Ref No.: SDG No.: Y4N51
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: H0295-06A
Sample wt/vol: 25.0 (g/mL) ML	Lab File ID: V5K5769.D
Level: (TRACE or LOW/MED) TRACE	Date Received: 03/04/2009
% Moisture: not dec.	Date Analyzed: 03/10/2009
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Purge Volume: 25.0 (mL)
CAS NUMBER COMPOUND NAME	RT EST. CONC. Q
01 Unknown-01	2.435 0.59 J
E966796 Total Alkanes	N/A

¹EPA-designated Registry Number.

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA	SAMPLE	NO.	
(4N64	1		
			EPA SAMPLE NO.

Lab Name:	MITKEM LABOR	ATORIES		Contract:	EP-W-05-030			
Lab Code:	MITKEM	Case No.:	38274	Mod. Ref No.:	SDG N	o.: Y	4N51	
Matrix: (S	SOIL/SED/WATER) WATER	·	Lab Sample ID:	H0295-13A			
Sample wt/	/vol: 25	.0 (g/mL)	ML	Lab File ID:	V5K5776.D			
Level: (T	RACE or LOW/ME	D) TRACE		Date Received:	03/05/2009			
% Moisture	e: not dec.			Date Analyzed:	03/10/2009			
GC Column:	DB-624	ID:	0.25 (mm)	Dilution Facto	r: 1.0			
Soil Extra	act Volume:		(uL)	Soil Aliquot V	olume:		(uL)	
CONCENTRAT	rion Units: (u	g/L or ug/	Kg) UG/L	Purge Volume:	25.0		(mL)	
CAS NU	MBER	COMPOUN	O NAME	RT	EST. CONC.		Q	
01 354.	ጲ3-4 Unknown	=01 Ethane 12	dichlono-1,1,2 tri	Juan 2.654	(0.67	J √	
02	Unknown	-02		2.723	(0.88	J	
E9	66796 Total A	lkanes		N/A				

SL, 5/109,

¹EPA-designated Registry Number.

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EP	A S	AMP.	LE	NO.	
Y4N	68				

Lab Name:	MITKEM LAI	BORATORI	ES			Mod. Ref No.:		EP-W-05-	EP-W-05-030			
Lab Code:	MITKEM	Case	No.:	38274				·	SDG No.:	Y4N51		
Matrix: (SOIL/SED/WATER) WATER						Lab	Sample ID:	H0295-17	H0295-17A			
Sample wt/	vol:	25.0 (g/mL)	ML		Lab	File ID:	V5K5780.	D			
Level: (TRACE or LOW/MED) TRACE					Dat	è Received:	03/06/2009					
% Moisture: not dec.						Dat	e Analyzed:	03/10/2009				
GC Column:	DB-624		ID:	0.25	(mm)	Dil	ution Factor	: 1.0				
Soil Extra	act Volume:				(uL)	Soi	l Aliquot Vo	lume:			(uL)	
CONCENTRAT	TION UNITS:	(ug/L c	r ug/K	(g) t	JG/L	Pur	rge Volume: 2	25.0			(mL)	
CAS NU	MBER	CO	MPOUND	NAME			RT	EST. (CONC.	Q	<u> </u>	
01 354-	-23-4 Ethar	ne, 1,2-	dichlo	ro-1,1,	2-t		2.657		4.6	NJ		

E966796 Total Alkanes
EPA-designated Registry Number.

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

	EPA	SAMPLE	NO.	
Γ	Y4N7()		
ı				
ı				

гар	Name:	MILLEM TAROKATOKIE2					Mod. Ref No.:		EP-W-05-030				
Lab	Lab Code: MITKEM Case No.: 38274		1	SDG No.: Y4N51									
Matrix: (SOIL/SED/WATER) WATER						Lai	Sample ID: H0295-19A						
Samp	ole wt/	vol:	25.0	(g/mL)	ML		Lal	o File ID:	V5K5782.	D			
Leve	el: (TR	RACE or	LOW/MED)	TRACE		-	Da	te Received:	03/06/20	09			
% Moisture: not dec.					Date Analyzed: 03/10/2009								
GC C	Column:	DB-6	524	ID:	0.25	(mm)	Di.	lution Factor	: 1.0				
Soil	Extra	ct Vol	ume:			(uL)	So	il Aliquot Vo	lume:				(uL)
CONC	CENTRAT	'ION UN	IITS: (ug/	L or ug/h	Kg)	UG/L	Pu	rge Volume: 2	25.0				(mL)
	CAS NUI	MBER	 -	COMPOUND	NAME	····		RT	EST.	CONC.		1	Q
01	354-	-23-4	Ethane, 1,	2-dichlo	ro-1,1	.,2-t		2.661			5.6	NJ	•
	E966796 Total Alkanes							N/A					

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA	SAMPLE	NO.
Y4N7	3	

Lab	O Name: MITKEM LABORATORIES			Contract:		EP-W-05-030	EP-W-05-030					
Lab	Code:	MITKE	СМ С	ase No.:	38274		Mod. Ref No.:		SDG	No.:	Y4N5	l .
Matrix: (SOIL/SED/WATER) WATER					Lab Sample ID: H0295-20A							
Sample wt/vol: 25.0 (g/mL) ML					Lab File ID: V5K5786.D							
Level: (TRACE or LOW/MED) TRACE					Da	Date Received: 03/06/2009						
% Moisture: not dec.					Date Analyzed: 03/10/2009							
GC Column: DB-624 ID: 0.25 (mm)				Dilution Factor: 1.0								
Soil Extract Volume: (uL)				Soil Aliquot Volume:					(uL)			
CONC	ENTRAT	ION UI	NITS: (ug/	L or ug/F	(g)	G/L	Pu	rge Volume:	25.0		***************************************	(mL)
ſ	CAS NUI	MBER		COMPOUND	NAME			RT	EST. CONC.		T	Q
01			Unknown-01					2.434		0.61	J	
E966796 Total Alkanes						N/A						

¹ EPA-designated Registry Number.